

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Canceled)
2. (Currently Amended) The ~~compound method~~ of claim 20 4, wherein each R⁴ is independently
 - (a) H,
 - (b) halo,
 - (e) SR¹²,
 - (f) S(O)_mR¹³,
 - (g) NR⁹R¹⁰,
 - (h) NR⁹S(O)_mR¹³,
 - (i) NR⁹C(=O)OR¹³,
 - (j) phenyl optionally substituted by one or more R⁸,
 - (k) heteroaryl optionally substituted by one or more R⁸,
 - (l) cyano,
 - (m) nitro,
 - (n) CONR⁹R¹⁰,
 - (o) CO₂R¹²,
 - (p) C(=O)R¹³,
 - (q) C(=NOR¹²)R¹³,
 - (s) NR⁹C(=O)-R¹²,
 - (t) C₁₋₇alkyl, C₁₋₇ alkenyl or C₁₋₇ alkynyl each of which is optionally partially unsaturated and is optionally substituted by one or more R¹¹, or
 - (u) het¹ optionally substituted by one or more R⁸.
3. (Currently Amended) The ~~compound method~~ of claim 2, wherein each R⁴ is independently selected from NO₂, H, Br, F, CF₃, CN, NH₂, -C(O)-OCH₃, -S-CH₃, -S(O)₂-CH₃, -N(OCH₃)-CH₃, -NH-C(O)-O-tbutyl, -NH-C(O)-CH₃, heteroaryl optionally

substituted by one or more R⁸, het¹ optionally substituted by one or more R⁸, -S(O)₂-CH₃, or phenyl optionally substituted by one or more of NO₂, Cl, F, -OCH₃, and -OCF₃.

4. (Currently Amended) The ~~compound method~~ of claim 20 †, wherein each R³ is H.

5. (Currently Amended) The ~~compound method~~ of claim 20 †, wherein R¹ is -C(O)R⁶.

6. (Currently Amended) The ~~compound method~~ of claim 20 †, wherein R² is -C(O)R⁷.

7. (Currently Amended) The ~~compound method~~ of claim 6, wherein R¹ is -C(O)R⁶

8. (Currently Amended) The ~~compound method~~ of claim 7, wherein R⁶ and R⁷ form -N(R¹⁷)-C(O)-N(R¹⁷)- or -N(R¹⁷)-C(S)-N(R¹⁷)-.

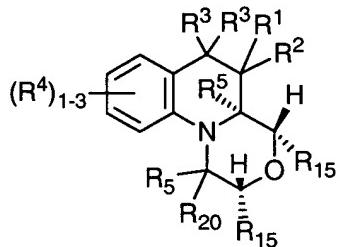
9. (Canceled)

10. (Canceled)

11. (Currently Amended) The ~~compound method~~ of claim 20 †, wherein each R¹⁵ is independently H, C₁₋₇ alkyl optionally substituted by one or more R¹¹ substituents.

12. (Currently Amended) The ~~compound method~~ of claim 11, wherein X is -C(H)(C₁₋₄ alkyl)-O-C(H)(C₁₋₄ alkyl)-.

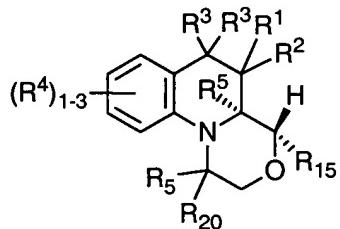
13. (Currently Amended) The ~~compound method~~ of claim 20 †, wherein the compound has the formula of



and each R₁₅ is independently (b), (c), (d), (e), (f),

or (g).

14. (Currently Amended) The compound method of claim 20 10, wherein the compound has the formula of



and each R₁₅ is independently (b), (c), (d), (e), (f),

or (g).

15. (Currently Amended) The compound method of claim 20 10, wherein R¹⁶ is (C=O)OR¹³ or C₁₋₇ alkyl.

16. (Currently Amended) The compound method of claim 20 4, wherein each R⁵ is independently H or C₁₋₇alkyl.

17. (Currently Amended) A The method of claim 20 wherein the compound comprises selected from

(2R,4S,4aS)-2,4-dimethyl-8-nitro-1,2,4,4a-tetrahydro-2'H,6H-spiro[1,4-oxazino[4,3-a]quinoline-5,5'-pyrimidine]-2',4',6'(1'H,3'H)-trione;

1,2,4,4a-Tetrahydro- 2,4-dimethylspiro[[1,4]oxazino[4,3-a]quinoline-5(6H), 5' (2'H)-pyrimidine]-2',4',6' (1' H,3' H)-trione;

8-Bromo-1,2,4,4a-tetrahydro-2,4-dimethylspiro[[1,4]oxazino[4,3-a]quinoline-5(6H), 5' (2' H)-pyrimidine]-2',4',6' (1' H,3' H)-trione;

8-Fluoro-1,2,4,4a-tetrahydro-2,4-dimethylspiro[[1,4]oxazino[4,3-a]quinoline-5(6H), 5' (2' H)-pyrimidine]-2',4',6' (1' H,3' H)-trione;

1,2,4,4a-Tetrahydro-2,4-dimethyl-8-trifluoromethylspiro[[1,4]oxazino[4,3-a]quinoline-5(6H), 5' (2' H)-pyrimidine]-2',4',6' (1' H,3' H)-trione;

1,1',2, 3'4,4',4a, 6'-Octahydro-2,4',6'-trioxospiro[[1,4]oxazino[4,3-a] quinoline-5(6H), 5' (2' H)-pyrimidine]-8-carbonitrile;

1,2,4,4a-Tetrahydro-2,4-dimethyl-8-carboxamidespiro[[1,4]oxazino[4,3-a]quinoline-5(6H), 5' (2' H)-pyrimidine]-2',4',6' (1' H,3' H)-trione;

1,2,4,4a-Tetrahydro-8-nitrospiro[[1,4]oxazino[4,3-a]quinoline-5(6H), 5' (2' H)-pyrimidine]-2',4',6' (1' H,3' H)-trione;

1,2,4,4a-Tetrahydro-2,4-dimethylspiro[[1,4]oxazino[4,3-a]quinoline-5(6H), 5' (2' H)-pyrimidine]-2',4',6' (1' H,3' H)-trione;

1,2,4,4a-Tetrahydro-1,4a-dimethyl-8-nitrospiro[[1,4]oxazino[4,3-a]quinoline-5(6H), 5' (2' H)-pyrimidine]-2',4',6' (1' H,3' H)-trione;

8-Bromo-1,2,4,4a-tetrahydro-cis-2,4-dimethylspiro[[1,4]oxazino[4,3-a]quinoline-5(6H), 5' (2' H)-pyrimidine]-4'-thioxo-2',6' (1' H,3' H)-dione;

8-Bromo-1,2,4,4a-tetrahydro-cis-2,4-dimethylspiro[[1,4]oxazino[4,3-a]quinoline-5(6H), 5' (2'H)pyrimidine]-2',4',6' (1' methyl, 3' methyl)-trione;

N-[1,1',2,3',4,4',4a,6'-Octahydro-2,4-dimethyl-2',4',6'-trioxospiro[[1,4]oxazino[4,3-a]quinolone-5(6H),5'(2'H)-pyrimidin]-8-yl]acetamide;

tert-butyl 1,1',2, 3',4,4',4a,6'-Octahydro-2,4-dimethyl-2',4',6'-trioxospiro[[1,4]oxazino[4,3-a]quinolone-5(6H),5'(2'H)-pyrimidin]-8-ylcarbamate;

8-Amino-1,2,4,4a-tetrahydro-2,4-dimethylspiro[[1,4]oxazino[4,3-a]quinolone-5(6H),5'(2'H)-pyrimidine]-2',4',6'(1'H,3'H)-trione monohydrochloride;

9-Bromo-1,2,4,4a-tetrahydro-2,4-dimethyl-8-nitrospiro[[1,4]oxazino[4,3-a]quinoline-5(6H), 5'(2'H)-pyrimidine]-2',4',6'(1'H,3'H)-trione;

8-Acetyl-1,2,4,4a-tetrahydro-2,4-dimethylspiro[[1,4]oxazino[4,3-a]quinoline-5(6H),5'(2H)-pyrimidine)-2',4',6' (1'H,3'H)-trione;

8-Ethanone-O-methyloxime-l-1,2,4,4a-tetrahydro-2,4-dimethylspiro[[1,4]oxazino[4,3-a]quinoline-5(6H),5'(2H)-pyrimidine)-2',4',6' (1'H,3'H)-trione;

1,2,4,4a-Tetrahydro-2,4-dimethyl-8-(methylsulfonyl)spiro[[1,4]oxazino [4,3-a]quinoline-5(6H),5'(2'H)-pyrimidine]-2',4',6'(1'H,3'H)-trione;

1,2,4,4a-Tetrahydro-2,4-dimethyl-8-(methylsulfinyl)spiro[[1,4]oxazino[4,3-a]quinoline-5(6H),5'(2'H)-pyrimidine]-2',4',6'(1'H,3'H)-trione;

1,2,4,4a-Tetrahydro-2,4-dimethyl-8-(methylthio)spiro[[1,4]oxazino[4,3-a]quinoline-5(6H),5'(2'H)-pyrimidine]-2',4',6'(1'H,3'H)-trione;

1,2,4,4a-Tetrahydro-2,4-dimethyl-9-nitrospiro[[1,4]oxazino[4,3-a]quinoline-5(6H),5'(2'H)-pyrimidine]-2',4',6'(1'H,3'H)-trione;

1,2,4,4a-Tetrahydro-2,4-dimethyl-8-nitrospiro[[1,4]oxazino[4,3-a]quinoline-5(6H),5'(2'H)-pyrimidine]-2',4',6'(1'methyl,3'methyl)-trione;

1,2,4,4a-Tetrahydro-2,4-dimethyl-8-nitrospiro[[1,4]oxazino[4,3-a]quinoline-5(6H),5'(2'H)-pyrimidine]-2',4',6'(1'H, 3'methyl)-trione;

1,2,4,4a-Tetrahydro-4-methyl-8-nitrospiro[[1,4]oxazino[4,3-a]quinoline-5(6H),5'(2'H)-pyrimidine]-2',4',6'(1'H,3'H)-trione;

1,2,4,4a-Tetrahydro-2-methyl-8-nitrospiro[[1,4]oxazino[4,3-a]quinoline-5(6H),5'(2'H)-pyrimidine]-2',4',6'(1'H,3's)-trione;

1,1',2'3'4'4'a-Hexahydro-2',4'-dimethyl-1,3-dioxospiro[2H-indene-2,5'(6'H)-[1,4]oxazino[4,3-a]quinoline]-8'-carbonitrile;

1,2,4,4a-Tetrahydro-2,4-dimethyl[1,4]oxazino[4,3-a]quinoline-5,5,8(6H)-tricarbonitrile;

8-Bromo-1,2,4,4a-tetrahydro-2,4-dimethyl[1,4]oxazino[4,3-a]quinoline-5,5(6H)-dicarbonitrile;

9-(4-Chlorophenyl)-1,2,4,4a-tetrahydro-2,4-dimethylspiro[[1,4]oxazino[4,3-a]quinoline-5(6H),5'(2'H)-pyrimidine]-2',4',6'(1'H,3'H)-trione;

1,2,4,4a-Tetrahydro-2,4-dimethyl-9-[4-(trifluoromethoxy)phenyl]spiro[[1,4]oxazino[4,3-a]quinoline-5(6H),5'(2'H)-pyrimidine]-2',4',6'(1'H,3'H)-trione;

1,2,4,4a-Tetrahydro-9-(methoxyphenyl)-2,4-dimethylspiro[[1,4]oxazino[4,3-a]quinoline-5(6H),5'(2'H)-pyrimidine]-2',4',6'(1'H,3'H)-trione;

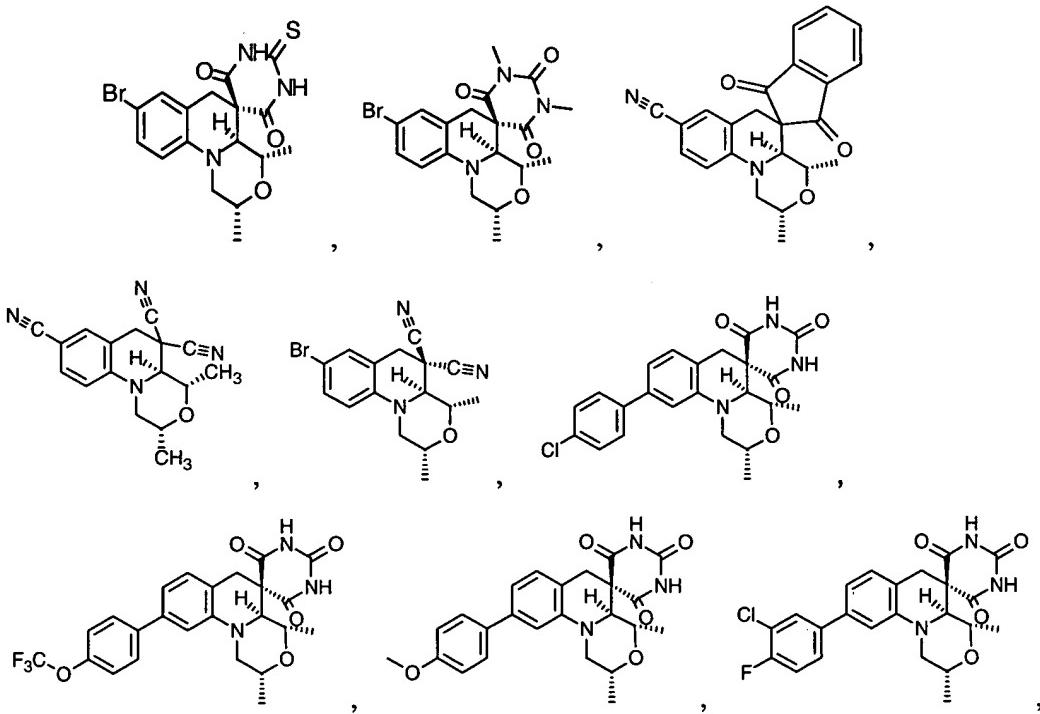
9-(3-Chloro-4-fluorophenyl)-1,2,4,4a-tetrahydro-2,4-dimethylspiro[[1,4]oxazino[4,3-a]quinoline-5(6H),5'(2'H)-pyrimidine]-2',4',6'(1'H,3'H)-trione;

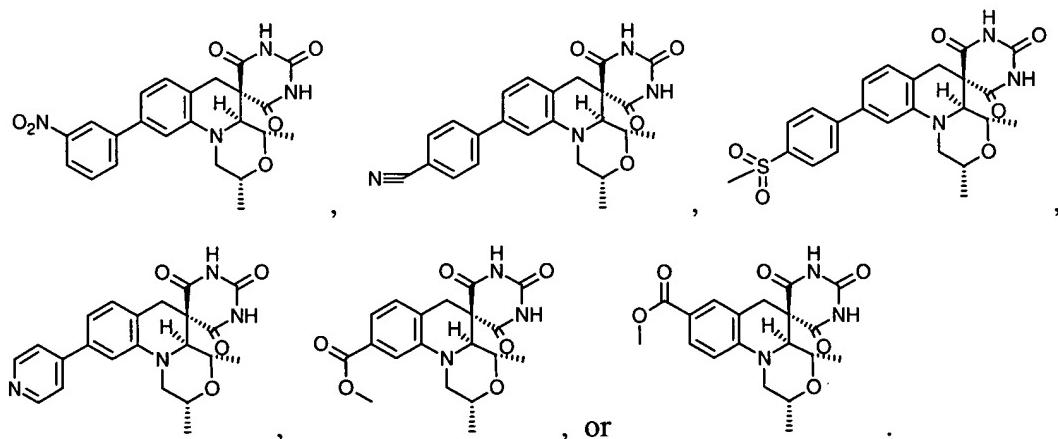
1,2,4,4a-Tetrahydro-2,4-dimethyl-9-(3-nitrophenyl)spiro[[1,4]oxazino[4,3-a]quinoline-5(6H),5'(2'H)-pyrimidine]-2',4',6'(1'H,3'H)-trione;

1,1',2,3',4,4',4a,6'-Octahydro-2,4-dimethyl-2',4',6'-trioxospiro[[1,4]oxazino[4,3-*a*]quinoline-5(6*H*),5(2'*H*)-pyrimidin]-9-yl]benzonitrile; 1,2,4,4a-Tetrahydro-2,4-dimethyl-9-[4-(methylsulfonyl)phenyl]spiro[[1,4]oxazino[4,3-*a*]quinoline-5(6*H*),5'(2'*H*)-pyrimidine]-2',4',6'('H,3'*H*)-trione; 1,2,4,4a-Tetrahydro-2,4-dimethyl-9-(4-pyridinyl)spiro[[1,4]oxazino[4,3-*a*]quinoline-5(6*H*),5'(2'*H*)-pyrimidine]-2',4',6'('H,3'*H*)-trione; Methyl-1,1'-2,3',4,4a,6'-Octahydro-2,4-dimethyl-2',4',6'-trioxospiro[[1,4]oxazino [4,3-*a*]quinoline-5(6*H*),5'(2'*H*)-pyrimidine]-9-carboxylate; and or

Methyl-1,1'-2,3',4,4a,6'-Octahydro-2,4-dimethyl-2',4',6'-trioxospiro[[1,4]oxazino [4,3-*a*]quinoline-5(6*H*),5'(2'*H*)-pyrimidine]-8-carboxylate.

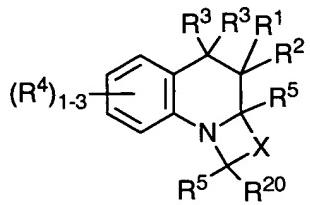
18. (Currently Amended) A The method of claim 20 wherein the compound comprises selected from





19. (Canceled)

20. (Currently Amended) A method for the treatment of bacterial infections in mammals comprising administration of an effective amount of a compound of claim 1 formula I, including enantiomeric, diastereomeric, or tautomeric isomers thereof, or any pharmaceutically acceptable salt thereof to said mammal;

**I**wherein,R¹ is

- (a) R¹²
- (b) C(=O)R⁶, or
- (c) CN;

R² is

- (a) R¹²
- (b) C(=O)R⁷,
- (c) CN,
- (d) -CH₂-R⁷,
- (e) -NR¹⁷R⁷,

(f) -CH₂COR⁷,

(g) -CH₂CH₂COR⁷;

Each R³ is independently

(a) H,

(b) R¹²,

(c) C₁₋₇ alkyl, C₁₋₇ alkenyl or C₁₋₇ alkynyl each of which is optionally substituted by one or more R¹¹,

(d) C₃₋₈ cycloalkyl, C₃₋₈ cycloalkenyl or C₃₋₈ cycloalkynyl each of which is optionally substituted by one or more R¹¹,

(e) aryl optionally substituted by one or more R⁸,

(f) heteroaryl optionally substituted by one or more R⁸,

(g) halo, or

(h) both R₃ taken together are oxo;

Each R⁴ is independently

(a) H,

(b) halo,

(c) OR¹²,

(d) OC(=O) NR⁹R¹⁰,

(e) SR¹²,

(f) S(O)_mR¹³,

(g) NR⁹R¹⁰,

(h) NR⁹S(O)_mR¹³,

(i) NR⁹C(=O)OR¹³,

(j) phenyl optionally substituted by one or more R⁸,

(k) heteroaryl optionally substituted by one or more R⁸,

(l) cyano,

(m) nitro,

(n) CONR⁹R¹⁰,

(o) CO₂R¹²,

(p) C(=O)R¹³,

(q) C(=NOR¹²)R¹³,

(r) $\text{S(O)}_m\text{NR}^9\text{R}^{10}$,

(s) $\text{NR}^9\text{C}(=\text{O})-\text{R}^{12}$,

(t) C_{1-7} alkyl, C_{1-7} alkenyl or C_{1-7} alkynyl each of which is optionally substituted by one or more R^{11} ,

(u) C_{3-8} cycloalkyl, C_{3-8} cycloalkenyl or C_{3-8} cycloalkynyl each of which is optionally substituted by one or more R^{11} ,

(v) N_3 ,

(w) het¹ optionally substituted by one or more R^8 , or

(x) $\text{C}(\text{O})\text{O}-\text{C}_{1-4}$ alkyl- R^{12} ;

Each R^5 is independently,

(a) H,

(b) C_{1-7} alkyl, C_{1-7} alkenyl or C_{1-7} alkynyl each of which is optionally substituted by one or more R^{11} ,

(c) C_{3-8} cycloalkyl, C_{3-8} cycloalkenyl or C_{3-8} cycloalkynyl each of which is optionally substituted by one or more R^{11} ,

(d) aryl optionally substituted by one or more R^8 , or

(e) heteroaryl optionally substituted by one or more R^8 ;

R^6 and R^7 are independently:

(a) OR^{12} ,

(b) NR^9R^{10} ,

(c) R^{13} , or

(e) R^6 and R^7 together with the 2 carbons to which they are attached form cyclohexane-1,3-dione optionally substituted by one or more R^{13} , cyclopentane-1,3-dione optionally substituted by one or more R^{13} , R^6 and R^7 together form - $\text{N}(\text{R}^{17})-\text{S}(\text{O})_m-$ $\text{N}(\text{R}^{17})-$, - $\text{N}(\text{R}^{17})-\text{C}(\text{O})-\text{N}(\text{R}^{17})-$, - $\text{N}(\text{R}^{17})-\text{C}(\text{S})-\text{N}(\text{R}^{17})-$, - $\text{N}(\text{R}^{17})-\text{N}(\text{R}^{17})-$, - $\text{N}(\text{R}^{17})-\text{C}(\text{O})-$, or - $\text{N}(\text{R}^{17})-$, or R^6 and R^7 together form a phenyl ring;

R^8 is

(a) H,

(b) halo,

(c) OR^{12} ,

- (d) OCF_3 ,
 - (e) SR^{12} ,
 - (f) $\text{S(O)}_m\text{R}^{13}$,
 - (g) NR^9R^{10} ,
 - (h) $\text{NR}^9\text{S(O)}_m\text{R}^{13}$,
 - (i) $\text{NR}^9\text{C}(=\text{O})\text{OR}^{13}$,
 - (j) phenyl optionally substituted by halo, cyano, $\text{C}_{1-7}\text{alkyl}$, or $\text{C}_{1-7}\text{alkoxy}$, in the alkyl portion of the $\text{C}_{1-7}\text{alkyl}$ and $\text{C}_{1-7}\text{alkoxy}$ is optionally substituted by one or more R^{11} ;
 - (k) heteroaryl optionally substituted by halo, $\text{C}_{1-7}\text{alkyl}$, or $\text{C}_{1-7}\text{alkoxy}$,
 - (l) cyano,
 - (m) nitro,
 - (n) $\text{CONR}^9\text{R}^{10}$,
 - (o) CO_2R^{12} ,
 - (p) $\text{C}(=\text{O})\text{R}^{13}$,
 - (q) $\text{C}(=\text{NOR}^{12})\text{R}^{13}$,
 - (r) $\text{S(O)}_m\text{NR}^9\text{R}^{10}$,
 - (s) $\text{NR}^9\text{C}(=\text{O})-\text{R}^{12}$,
 - (t) $\text{C}_{1-7}\text{alkyl}$, $\text{C}_{1-7}\text{alkenyl}$ or $\text{C}_{1-7}\text{alkynyl}$ each of which is optionally substituted by one or more R^{11} ,
 - (u) $\text{C}_{3-8}\text{cycloalkyl}$, $\text{C}_{3-8}\text{cycloalkenyl}$ or $\text{C}_{3-8}\text{cycloalkynyl}$ each of which is optionally substituted by one or more R^{11} ,
 - (v) $-\text{C}(\text{O})\text{H}$, or
 - (w) -het¹;
- R^9 and R^{10} are independently
- (a) H,
 - (b) OR^{12} ,
 - (c) aryl optionally substituted by one or more R^{14} ,
 - (d) heteroaryl optionally substituted by one or more R^{14} ,
 - (e) $\text{C}_{1-7}\text{alkyl}$ which is optionally substituted by one or more R^{11} ,
 - (f) $\text{C}_{3-8}\text{cycloalkyl}$ which is optionally substituted by one or more R^{11} ,

(g) (C=O)R¹³, or

(h) R⁹ and R¹⁰ together with the nitrogen to which they are attached form morpholine, pyrrolidine, piperidine, thiazine, piperazine, each of the morpholine, pyrrolidine, piperidine, thiazine, piperazine being optionally substituted with R¹¹;

R¹¹ is

(a) oxo,

(b) phenyl optionally substituted by one or more R¹⁴,

(c) OR¹²,

(d) SR¹²,

(e) NR¹²R¹²,

(f) halo,

(g) CO₂R¹²,

(h) CONR¹²R¹²,

(i) C₁₋₇ alkyl, C₁₋₇ alkenyl or C₁₋₇ alkynyl each of which is optionally substituted by one or more oxo, halo, OR¹², SR¹², C₁₋₇alkyl, or NR¹²R¹² substituents, or

(j) C₃₋₈ cycloalkyl, C₃₋₈ cycloalkenyl or C₃₋₈ cycloalkynyl each of which is optionally substituted by one or more oxo, halo, OR¹², SR¹², C₁₋₇alkyl, or NR¹²R¹² substituents;

R¹² is

(a) H,

(b) C₁₋₇ alkyl, C₁₋₇ alkenyl or C₁₋₇ alkynyl each of which is optionally substituted by oxo, halo, C₁₋₇alkyl, or C₁₋₇alkoxy substituents,

(c) C₃₋₈ cycloalkyl, C₃₋₈ cycloalkenyl or C₃₋₈ cycloalkynyl each of which is optionally substituted by one or more oxo, halo, C₁₋₇alkyl, or C₁₋₇alkoxy substituents,

(d) aryl optionally substituted by one or more halo, C₁₋₇alkyl, or C₁₋₇alkoxy substituents, or

(e) heteroaryl optionally substituted by one or more halo, C₁₋₇alkyl, or C₁₋₇alkoxy substituents;

R¹³ is

(a) C_{1-7} alkyl which is optionally substituted by one or more by oxo, halo, carboxyl, C_{1-7} alkyl, or C_{1-7} alkoxy substituents,

(b) C_{3-8} cycloalkyl, C_{3-8} cycloalkenyl or C_{3-8} cycloalkynyl each of which is optionally substituted by one or more by oxo, halo, C_{1-7} alkyl, or C_{1-7} alkoxy substituents,

(c) aryl optionally substituted by one or more halo, C_{1-7} alkyl, or C_{1-7} alkoxy substituents;

(d) heteroaryl optionally substituted by one or more halo, C_{1-7} alkyl, or C_{1-7} alkoxy substituents,

(e) $-C(O)OH$

R^{14} is

(a) H,

(b) halo,

(c) C_{1-7} alkyl,

(d) OR^{12} ,

(e) OCF_3 ,

(f) SR^{12} ,

(g) $S(O)_mR^{13}$,

(h) $NR^{12}R^{12}$,

(i) $NR^{12}S(O)_mR^{13}$,

(j) $NR^{12}C(=O)OR^{13}$,

(k) phenyl optionally substituted by halo, C_{1-7} alkyl, or C_{1-7} alkoxy,

(l) heteroaryl optionally substituted by halo, C_{1-7} alkyl, or C_{1-7} alkoxy,

(m) cyano,

(n) nitro,

(o) $CONR^{12}R^{12}$,

(p) CO_2R^{12} ,

(q) $C(=O)R^{13}$,

(r) $C(=NOR^{12})R^{13}$,

(s) $S(O)_mNR^{12}R^{12}$,

(t) $NR^9C(=O)-R^{12}$,

(u) C_{1-7} alkyl, C_{1-7} alkenyl or C_{1-7} alkynyl each of which is optionally substituted by oxo, halo, OR¹², SR¹², C_{1-7} alkyl, or NR¹²R¹² substituents, or

(v) C_{3-8} cycloalkyl, C_{3-8} cycloalkenyl or C_{3-8} cycloalkynyl each of which is optionally substituted by oxo, halo, OR¹², SR¹², C_{1-7} alkyl, or NR¹²R¹² substituents;

X is -C(R¹⁵)₂-O-C(R¹⁵)₂-;

Each R¹⁵ is independently

(a) H,

(b) OR¹¹,

(c) Oxo,

(d) C_{1-7} alkyl which is optionally substituted by one or more R¹¹ substituents,

(e) C_{3-8} cycloalkyl, C_{3-8} cycloalkenyl or C_{3-8} cycloalkynyl each of which is optionally substituted by one or more R¹¹ substituents,

(f) aryl optionally substituted by one or more R⁸, or

(g) heteroaryl optionally substituted by one or more R⁸;

R¹⁶ is

(a) H

(b) OR¹²,

(c) (C=O)R¹³,

(d) (C=O)OR¹³,

(e) (C=O)NR⁹R¹⁰,

(f) S(O)_mR¹³,

(g) S(O)_mNR⁹R¹⁰,

(h) C_{1-7} alkyl which is optionally substituted by one or more R¹¹ substituents,

(i) C_{3-8} cycloalkyl, C_{3-8} cycloalkenyl or C_{3-8} cycloalkynyl each of which is optionally substituted by one or more R¹¹ substituents,

(j) aryl optionally substituted by one or more R⁸, or

(k) heteroaryl optionally substituted by one or more R⁸;

R¹⁷ is

(a) H,

(b) -OH, or

(c) C₁₋₄alkyl;

R¹⁹ is

(a) H,

(b) OR¹¹,

(c) Oxo,

(d) C₁₋₇ alkyl which is optionally substituted by one or more R¹¹ substituents,

(e) C₃₋₈ cycloalkyl, C₃₋₈ cycloalkenyl or C₃₋₈ cycloalkynyl each of which is optionally substituted by one or more R¹¹ substituents,

(f) aryl optionally substituted by one or more R⁸, or

(g) heteroaryl optionally substituted by one or more R⁸;

R²⁰ is

(a) H,

(b) C₁₋₇ alkyl, C₁₋₇ alkenyl or C₁₋₇ alkynyl each of which is optionally substituted by one or more R¹¹,

(c) C₃₋₈ cycloalkyl, C₃₋₈ cycloalkenyl or C₃₋₈ cycloalkynyl each of which is optionally substituted by one or more R¹¹,

(d) aryl optionally substituted by one or more R⁸,

(e) heteroaryl optionally substituted by one or more R⁸, or

(f) R²⁰ and R¹⁹, taken together, form -CH₂-;

wherein, "aryl" denotes a phenyl radical or an ortho-fused bicyclic carbocyclic radical having about nine to ten ring atoms in which at least one ring is aromatic;

wherein, "heteroaryl" encompasses a radical attached via a ring carbon or ring nitrogen of a monocyclic aromatic ring containing five or six ring atoms consisting of carbon and 1, 2, 3, or 4 heteroatoms, selected from oxygen (-O-), sulfur (-S-), oxygenated sulfur such as sulfinyl (S=O) and sulfonyl (S(=O)₂), or nitrogen N(Z) wherein Z is absent or is H, O, C₁₋₄alkyl, phenyl or benzyl, or a radical of an ortho-fused bicyclic heterocycle of about eight to ten ring atoms derived therefrom;

het¹ is a C- or N- linked five- (5), six- (6), seven- (7), or eight- (8) membered mono- or bicyclic ring, each mono- or bicyclic ring being fully saturated or partially unsaturated, and having 1-4 heteroatoms selected from the group consisting of oxygen, sulfur, and nitrogen; het¹ being optionally substituted by 1-2 substituents selected from C₁-C₄alkyl, amino, C₁-C₄alkylamino, C₁-C₄alkyloxy, halogen -CN, =O, =S;

each m is independently 0, 1, or 2; and

each n is independently 1, 2, or 3.

21. (Currently Amended) The method of claim 20 wherein said compound of ~~claim 1~~ is administered to the mammal orally, parenterally, transdermally, or topically in a pharmaceutical composition.

22. (Original) The method of claim 20 wherein said compound is administered in an amount of from about 0.1 to about 100 mg/kg of body weight/day.

23. (Original) The method of claim 20 wherein said compound is administered in an amount of from about 1 to about 50 mg/kg of body weight/day.

24. (Canceled)

25. (Canceled)

26. (Currently Amended) The ~~composition~~ method of claim 25 ~~20~~ wherein the composition comprises an enantiomerically enriched form of a compound of formula I.

27. (Currently Amended) The ~~composition~~ method of claim 26, wherein the composition comprises at least 50% of one enantiomer of a compound of formula I relative to the other enantiomer of the compound.

28. (Currently Amended) The ~~compositions~~ method of claim 27, wherein the composition comprises at least 80% of one enantiomer of a compound of formula I relative to the other enantiomer of the compound.

29. (Currently Amended) The ~~composition~~ method of claim 27, wherein the composition comprises at least 90% of one enantiomer of a compound of formula I relative to the other enantiomer of the compound.

30. (Currently Amended) A The method of claim 20 wherein the compound selected from comprises

(2S,4R,4aR)-4-isopropyl-2-methyl-8-nitro-1,2,4,4a-tetrahydro-2'H,6H-spiro[1,4-oxazino[4,3-a]quinoline-5,5'-pyrimidine]-2',4',6'(1'H,3'H)-trione;

(2R,4S,4aS)-2,4-diethyl-8-nitro-1,2,4,4a-tetrahydro-2'H,6H-spiro[1,4-oxazino[4,3-a]quinoline-5,5'-pyrimidine]-2',4',6'(1'H,3'H)-trione;

(2R,4S,4aS)-2,4-dimethyl-8-nitro-1,2,4,4a-tetrahydro-2'H,6H-spiro[1,4-oxazino[4,3-a]quinoline-5,5'-pyrimidine]-2',4',6'(1'H,3'H)-trione;

(2R,4S,4aS)-8-acetyl-9,10-difluoro-2,4-dimethyl-1,2,4,4a-tetrahydro-2'H,6H-spiro[1,4-oxazino[4,3-a]quinoline-5,5'-pyrimidine]-2',4',6'(1'H,3'H)-trione;

(2R,4S,4aS)-10-fluoro-2,4-dimethyl-8-nitro-1,2,4,4a-tetrahydro-2'H,6H-spiro[1,4-oxazino[4,3-a]quinoline-5,5'-pyrimidine]-2',4',6'(1'H,3'H)-trione;

(2R,4S,4aS)-2,4-dimethyl-8-[5-(trifluoromethyl)-1,2,4-oxadiazol-3-yl]-1,2,4,4a-tetrahydro-2'H,6H-spiro[1,4-oxazino[4,3-a]quinoline-5,5'-pyrimidine]-2',4',6'(1'H,3'H)-trione;

1,2,4,4a-Tetrahydro-2,4-dimethyl-8-nitrospiro[[1,4]oxazino[4,3-a]quinoline-5(6H),5'(2'H)-pyrimidine]-2',4',6'(1'H,3'H)-trione;

(2S,4R,4aR)-2-isopropyl-4-methyl-8-nitro-1,2,4,4a-tetrahydro-2'H,6H-spiro[1,4-oxazino[4,3-a]quinoline-5,5'-pyrimidine]-2',4',6'(1'H,3'H)-trione;

(2S,4R,4aR)-2-isopropyl-4-methyl-8-nitro-1,2,4,4a-tetrahydro-2'H,6H-spiro[1,4-oxazino[4,3-a]quinoline-5,5'-pyrimidine]-2',4',6'(1'H,3'H)-trione;

(2R,4S,4aS)-2,4-diisopropyl-8-nitro-1,2,4,4a-tetrahydro-2'H,6H-spiro[1,4-oxazino[4,3-a]quinoline-5,5'-pyrimidine]-2',4',6'(1'H,3'H)-trione;

(2R,4S,4aS)-2,4-dimethyl-8-(3-methyl-1,2,4-oxadiazol-5-yl)-1,2,4,4a-tetrahydro-2'H,6H-spiro[1,4-oxazino[4,3-a]quinoline-5,5'-pyrimidine]-2',4',6'(1'H,3'H)-trione;

(2S,4R,4aR)-8-acetyl-10-fluoro-2,4-dimethyl-1,2,4,4a-tetrahydro-2'H,6H-spiro[1,4-oxazino[4,3-a]quinoline-5,5'-pyrimidine]-2',4',6'(1'H,3'H)-trione;

8-bromo-2,4-dimethyl-10-nitro-1,2,4,4a-tetrahydro-2'H,6H-spiro[1,4-oxazino[4,3-a]quinoline-5,5'-pyrimidine]-2',4',6'(1'H,3'H)-trione;

(2R,4S,4aS)-2,4-dimethyl-8-(5-methyl-1,2,4-oxadiazol-3-yl)-1,2,4,4a-tetrahydro-2'H,6H-spiro[1,4-oxazino[4,3-a]quinoline-5,5'-pyrimidine]-2',4',6'(1'H,3'H)-trione;

(2S,4S,4aS)-4-methyl-8-nitro-2-(trifluoromethyl)-1,2,4,4a-tetrahydro-2'H,6H-spiro[1,4-oxazino[4,3-a]quinoline-5,5'-pyrimidine]-2',4',6'(1'H,3'H)-trione;

4-azido-3-iodobenzyl (2R,4S,4aS)-2,4-dimethyl-2',4',6'-trioxo-1,1',2,3',4,4',4a,6'-octahydro-2'H,6H-spiro[1,4-oxazino[4,3-a]quinoline-5,5'-pyrimidine]-8-carboxylate; or

(2S,4S,4aS)-2,4-dimethyl-8-nitro-1,2,4,4a-tetrahydro-2'H,6H-spiro[1,4-oxazino[4,3-a]quinoline-5,5'-pyrimidine]-2',4',6'(1'H,3'H)-trione.

31. (New) The method of claim 20 wherein:

when each R₄ is H, that R₁ and R₂ are not simultaneously H, CN, or -C(O)-OCH₃ or that R₁ is not CN and R₂ is not -C(O)-OC₁₋₄alkyl;

when the compound is 1,2,4,4a-Tetrahydro-cis-2,4-dimethyl-8-nitrospiro[[1,4]oxazino[4,3-a]quinoline-5(6H), 5' (2' H)-pyrimidine]-2',4',6' (1' H,3' H)-trione that the compound is enantiomerically enriched (-) form of (2R,4S,4aS)-2,4-dimethyl-8-nitro-1,2,4,4a-tetrahydro-2'H,6H-spiro[1,4-oxazino[4,3-a]quinoline-5,5'-pyrimidine]-2',4',6'(1'H,3'H)-trione.

32. (New) The method of claim 20 wherein the compound of formula I is administered as a pharmaceutical composition, wherein the pharmaceutical composition additionally comprises a pharmaceutically acceptable carrier.

33. (New) The method of claim 4 wherein:

R¹ is -C(O)R⁶;

R² is -C(O)R⁷;

each R⁴ is independently selected from H, F and heteroaryl optionally substituted by one or more R⁸;

each R⁵ is H;

R⁶ and R⁷ form -N(R¹⁷)-C(O)-N(R¹⁷)-;

each R¹⁷ is H;

R²⁰ is H; and

X is -C(H)(C₁₋₄ alkyl)-O-C(H)(C₁₋₄ alkyl)-.

34. (New) The method of claim 33 wherein R⁸ is C₁₋₇ alkyl.

35. (New) The method of claim 13 wherein:

R¹ is -C(O)R⁶;

R² is -C(O)R⁷;

each R³ is H;

each R⁴ is independently selected from H, F and heteroaryl optionally substituted by one or more R⁸;

each R⁵ is H;

R⁶ and R⁷ form -N(R¹⁷)-C(O)-N(R¹⁷)-;

each R¹⁵ is C₁₋₇ alkyl;

each R¹⁷ is H; and

R²⁰ is H.

36. (New) The method of claim 35 wherein R⁸ is C₁₋₇ alkyl.